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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,326	12/13/2001	Chongying Xu	ATMI - 515	2946

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ATMI, INC.
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EXAMINER	
MANOHARAN, VIRGINIA	

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/015,326	XU ET AL.	
	Examiner	Art Unit	
	Virginia Manoharan	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 9-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 9-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) The claims are rejected for the same reasons as set forth at section (d) of the previous Office action. [Note the "said impurity" in claims 2-4 as opposed to "at least one impurity" in the preamble of claim 1].

(b) Claim 10 is in improper Markush grouping because of the double inclusion of elements in the grouping such as: "calcium hydride" which falls within the generic "metal hydrides".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 & 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McEntee(4,127,598) or Tsukuno et al (5,312,947).

The above references each is applied for the same reasons as set forth at pages 5-6 of the previous Office action.

Applicant's arguments filed September 17, 2003 have been fully considered but they are not persuasive.

The argued "recrystallization of ionic crystals by dissolution (addition) in water...by Tsukuno" is not commensurate with the scope of the claimed invention as it is not preluded by the claim reciting "comprising" which is an all- inclusive term.

Furthermore, applicants following arguments such as :

"McEntee fails to teach or suggest a process for reducing water concentration in cyclosiloxanes, but rather teaches a process for removing from silanes and siloxanes, toxic, organic impurities identified specifically as biphenyls, chlorinated biphenyls, aromatic hydrocarbons, carbon tetrachloride and/or vinyl chloride.....The present invention advantageously provides" cyclosiloxanes .... by removing water and/or basic impurities, which cause their catalytic premature decomposition during chemical vapor deposition processes, as taught in the present application, on page 8..." are not persuasive of patentability because of the following reasons:

The above argued "carbon tetrachloride vinyl chloride", and etc, would fall within the claimed "at least one other impurity as broadly claimed in claim 1 or the acidic impurities as claimed e.g, in claims 2-3. While McEntee is silent about the argued "reducing water concentration, however, McEntee, like the applicants, is subjecting the same siloxanes compounds to the same process step of contacting said siloxanes with the same absorbent bed material. Thus the process of Mcentee will obviously naturally remove or reduce the water concentration, if present, since the absorbent bed is known to remove effectively water from siloxane. It is noteworthy that only physical unit of operation i.e., absorption with a solid agent is involved. No chemical reaction is involve. Moreover, McEntee is not limited to the above argued impurities. McEntee suggests or

contemplates, col.4, lines 39-43, that the process generally can be used to remove other impurities from streams of silanes or siloxanes. In addition, the claims are not limited to the argued "... catalylic premature decomposition during chemical vapor deposition. .. " commensurate with the scope of the argument.

Also, applicants' reliance on the specification is of no patentable moment because statement of the argued limitations included in the claims.

The arguments relative to Rossmy are now rendered moot since this reference has been dropped from the above rejection in view of applicants' amendments to the claims, i.e., deleting the limitations to which Rossmy has been relied upon.

Thus, in the absence of anything which may be "new" or "unexpected result", a prima facie case of obviousness has been reasonably established by the art and has not been rebutted.

Unexpected results must be established by factual evidence. Mere arguments or conclusory statements in the specification, appellants' amendments, or the Brief do not suffice. In re Lindner, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972). In re Wood, 582, F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Marko et al discloses a process wherein the molecular is effective in removing water from the siloxanes and since ionic chloride strongly partitions into the water phase ionic chloride is removed along with the water phase.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is (571) 272-1450. The examiner can normally be reached on Tuesday-Friday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manoharan/tgd

March 9, 2004

VIRGINIA MANOHARAN
PRIMARY EXAMINER
ART UNIT 1764